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(54) Title: **ALKENYLSUCCINIC ANHYDRIDE SURFACE-APPLIED SYSTEM AND METHOD FOR USING THE SAME**

(57) Abstract: The invention relates to an aqueous sizing composition including: (a) a first component comprising an emulsion having an alkenylsuccinic anhydride component containing alkenylsuccinic anhydride particles and a surfactant component; suspended in water; and (b) a second component selected from the group consisting of cationic starches, non-ionic starches, anionic starches, water, water-soluble polymers, and mixtures thereof; such that the alkenylsuccinic anhydride component and the second component are sufficiently diluted to enable the sizing composition to impart useful sizing properties to a fibrous substrate when the sizing composition contacts the fibrous substrate. The invention also relates to fibrous substrates treated with such a composition as well as processes for making and using the composition. In one embodiment, alkyl ketene dimer is used instead of alkenylsuccinic anhydride.